DOCUMENT RESUME

ED 463 092 PS 030 246

AUTHOR Glaubke, Christina R.; Miller, Patti; Parker, McCrae A.; Espejo, Eileen

TITLE Fair Play? Violence, Gender and Race in Video Games.

INSTITUTION Children Now, Oakland, CA.

PUB DATE 2001-00-00

NOTE 37p.; Research was conducted by Katharine Heintz-Knowles and Jennifer Henderson. Support provided by the Atlantic Philanthropic Service Company, Inc.

AVAILABLE FROM Children NOW, 1212 Broadway, 5th Floor, Oakland, CA 94612. Tel: 510-763-2444; Fax: 510-763-1974; e-mail: children@childrennow.org; Web site: http://www.childrennow.org.

PUB TYPE Reports - Research (143)

EDRS PRICE MF01/PC02 Plus Postage.

DESCRIPTORS *Children; Computer Games; *Games; Mass Media Effects; Racial Balance; Sex Differences; Sex Stereotypes; *Stereotypes; *Video Games; *Violence

ABSTRACT

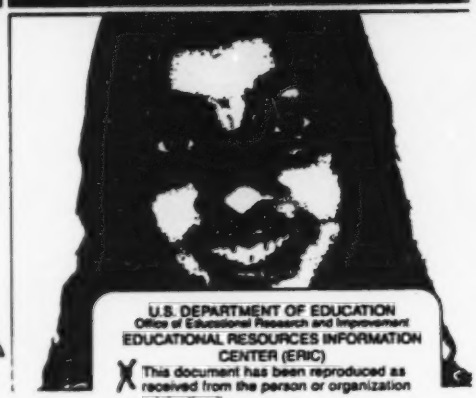
Based on the view that the level of market penetration of video games combined with the high levels of realism portrayed in these games make it important to investigate the messages video games send children, this report details a study of the 10 top-selling video games for each of 6 game systems available in the United States and for personal computers. The report identifies some of the unhealthy social messages such games may be sending to young players about violence, gender, and race and contains ideas for improving games for children. The report also answers frequently asked questions about video violence. Findings of the study of 70 games revealed that video games often glorified violence, ignored women and people of color, and reinforced racial and gender stereotypes. Video games were overwhelmingly violent, with nearly every game containing some violent content and too often without consequence to the perpetrator or the victim. Comparisons across game systems revealed considerable variation. A list of the video games examined completes the report. (Contains 25 endnotes.) (KB)

Reproductions supplied by EDRS are the best that can be made from the original document.

ED 463 092

CHILDREN NOW

PS 030246



Fair Play?

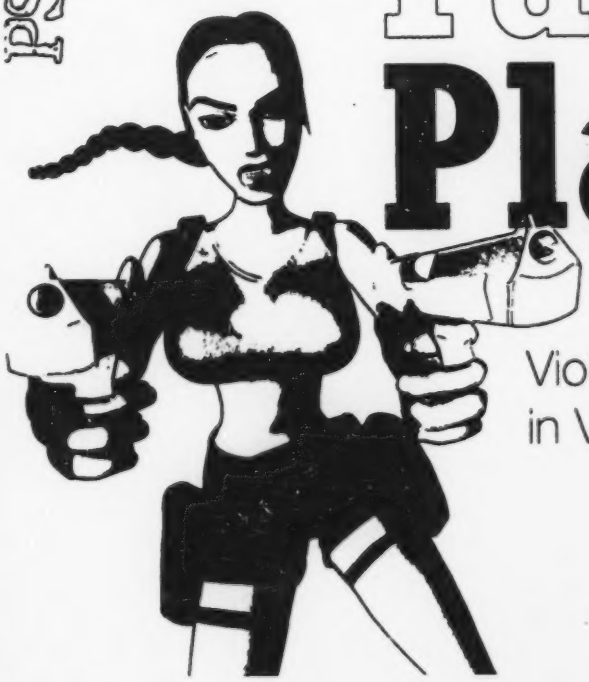
U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Amy Dominguez-Arms

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)



Violence, Gender and Race in Video Games

BEST COPY AVAILABLE

Highlights

Violence page 4

- Most of the top-selling video games (89%) contained violent content, almost half of which was serious in nature.
- Killing was almost always seen as justified in the games and players were **always rewarded** for their **acts of violence**.
- The negative consequences of violence were rarely shown, with most **victims appearing unaffected** by the aggressive acts committed against them.
- More than three fourths of **games rated "E"** for "Everyone" (79%) **contained violent content**. In half of these games, violence was significant to the plot.

Gender page 10

- Female characters were severely under-represented in video games, accounting for only 16% of all characters.
- **Male characters were** most likely to be portrayed as **competitors (47%)**, while **female characters were** most likely to be portrayed as **props or bystanders (50%)**.
- **Male and female character roles** and behaviors were frequently **stereotyped**, with males more likely to engage in physical aggression and females more likely to scream, wear revealing clothing and be nurturing.

Games for Girls page 16

- Video games in this study contained **very few features** found to be **appealing to girls**.
- PC games were the most likely of any of the game systems to contain features that appeal to girls.

Race page 20

- White characters were the majority in the video game population (56%) and were the only human characters in children's games.
- There were **no Latina characters or Native American male characters** in any of the games.
- Nearly all **heroes were white** while African Americans and Latinos were typically athletes and Asian/Pacific Islanders were usually wrestlers or fighters.
- African American characters were the least likely to show harm when they were victimized (61%), while nearly all Latino victims demonstrated harm and pain (83%).

System Comparisons page 24

- Each of the game systems displayed their own strengths and weaknesses in the areas of violence, gender and race.
- Overall, video games have **room for much improvement** in terms of racial and gender stereotyping, girl-friendliness, violence and age-appropriateness.

Introduction

There are probably few adults these days who don't remember the excitement of playing early video games such as Pac Man, Space Invaders and Frogger. The ability to interact with a machine in a game situation was thrilling–and still is. Today, the little yellow dot-eater and the highly pixilated spaceships have evolved into seamlessly animated characters, graphic images of demons, and lifelike humans complete with lifelike weapons and lifelike blood.

Video games were a $6 billion industry in 2000 and sales are projected to reach as high as $8 billion in 2001.[1] Over 280 million units were sold in 2000 alone,[2] and it is estimated that 60% of all Americans, or about 145 million people, play video games on a regular basis.[3] This level of market penetration, combined with the high levels of realism, makes it important to investigate the messages video games send children.

There are some benefits to video games. Studies have found that playing video games can improve children's visual attention skills, their spatial skills, their iconic skills and their computer literacy skills.[4] In addition, the use of educational games, which are almost exclusively sold for the PC, have been shown to help improve academic performance.[5]

However, many more studies have shown relationships between playing video games and unhealthy outcomes, such as isolation and loneliness, obesity, belief in gender stereotypes and increased aggressive behavior.[6] In fact, video games' unique interactive capabilities may make them even more likely to influence children's attitudes, beliefs and behaviors than more traditional forms of media.

Fair Play? Violence, Gender and Race in Video Games examines the top-selling video games for each of the seven different game systems. *Fair Play?* identifies some of the unhealthy social messages that video games may be sending to young players about violence, gender and race and contains ideas for improving games for children.

"Computer and video games bring us into imaginary worlds and allow us to define who we are, how we behave, and how we relate to others in the game; they challenge us intellectually; they excite us; they educate and empower us."

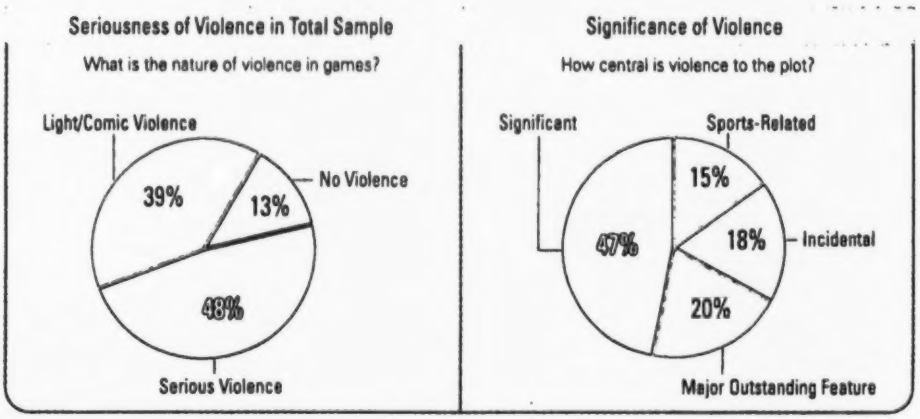
Douglas Lowenstein, President, Interactive Digital Software Association.

Note: In this report the term "video game" refers to both games played on a personal computer and games played on a console system.

Violence

Since the early 1960s, over a thousand studies have indicated a relationship between sustained exposure to violent media and real-life aggression in some children.[7] This relationship has been acknowledged by much of the academic community, as well as by many highly respected organizations including the American Academy of Pediatrics, the American Psychological Association, the American Medical Association and the National Institute for Mental Health.

In recent years, researchers have begun to look at the potential connection between playing violent video games and subsequent aggressive behavior. Preliminary research has shown that playing violent video games can increase children's aggressive behavior and can result in emotional responses of anger and hostility. This is especially true for young children.[8] Further, some researchers believe that compared to other visual media, the interactive nature of the games could actually increase the likelihood of aggressive behavior, as it enables players to engage in realistic violent actions.



Predominance of Violence

Violence was a predominant feature in almost all of the video games analyzed. Of the 70 games included in this study, 61 (89%) contained some kind of violence. Almost half of all games (49%) contained serious violence, while 40% contained comic violence.

Violence was significant in 41% of games, meaning that violence was necessary for the protagonists to achieve their goals. In 17% of the games, violence was the primary focus of the game itself. Thus, in the majority of the games, players could not even participate in the game without engaging in violence.

Consequences of Violence

There was no punishment for killing in any of the games. Although less than one fifth of all characters were capable of killing (17%), there were no negative consequences for characters that killed other characters. Protagonists usually received some sort of reward, while antagonists simply maintained their positions.

Tekken 3

Sonic Adventure 2

Did You Know?

A Stanford University study found that when third- and fourth-graders' television and video game consumption was reduced to under seven hours per week for 20 weeks, their verbal aggression decreased by 50% and their physical aggression decreased by 40%.[9]

Killing by player-controlled characters was almost always seen as justified. Nine out of ten player-controlled killings (91%) were justified in the games. Conversely, killing by computer-controlled characters was almost always seen as unjustified (75%). The media's justification of violence is one factor that can increase the likelihood of children's learned aggression, desensitization and fear.[10]

A majority of the victims of violence were not harmed. Of the sixty percent of characters who were capable of being victims of violence, a majority were not seriously harmed, with more than half of the total characters (52%) either appearing unaffected by the violence or only being temporarily disabled by the violence.

Use Of Weapons

Most video game violence was committed without the use of weapons. Nearly half of the human characters committed violent acts (45%). Of those violent characters, more than three fourths engaged in aggression without the use of weapons (81%), while only 41% used weapons to commit their aggression. Twenty-two percent of those characters engaged in violent behavior both with and without weapons.

Guns were the weapons of choice for violent characters. Of those human characters who used weapons, 24% used some type of gun. Bats or clubs were the next most popular weapons, serving 22% of those who used weapons.

Did You Know?

According to the 1997 National Television Violence Study, the probability that a violent portrayal will lead to aggressive behavior, desensitization to violence or fear increases when the pain and suffering associated with violence is not depicted.[11]

These findings are corroborated by Lieutenant Colonel David Grossman, a former Army psychologist who knows about video games' power to teach violent behavior. He used them to teach military soldiers how to kill without hesitation. He found that when the blood, gore and emotions of the victims in the games were eliminated, the soldiers began to think of killing as more of a game.[12] The problem, he explains, is that video games help children (and soldiers) become desensitized to violence. "We are teaching children to associate pleasure with human death and suffering. We are rewarding them for killing people. And we are teaching them to like it."[13]

Earthworm Jim

You Can't Judge a Game by Its Rating

How accurate are the Entertainment Software Ratings Board (ESRB) ratings on video game packages? The National Institute on Media and the Family decided to find out. In 2000, they asked parents and child development experts to rate 132 video games for their age appropriateness. The panel determined that, based on violent and sexual content, 32% of the games rated "E" for "Everyone" were either questionable or inappropriate for 3 to 7 year-olds, and that 13% of E-rated games were either questionable or inappropriate for 8 to 12 year-olds. In addition, 57% of the T (Teen) rated games were deemed questionable or inappropriate for 12- to 17-year-olds. Given these findings, it seems that parents may want to judge games for themselves rather than relying on the opinions of the ESRB.

FAQs

What is the difference between comic and serious violence?

Comic depictions of violence are those depictions portrayed in a humorous or playful context, often in a slapstick manner, usually with little or no harm to the victim(s). Comic violence is often accompanied by silly sound effects (i.e. "boings") or upbeat music. Serious depictions of violence are more dramatic, often realistic in context and frequently results in harm to the victim(s). Victims and perpetrators of serious violence often respond with grunts and/or screams and frequently bleed.

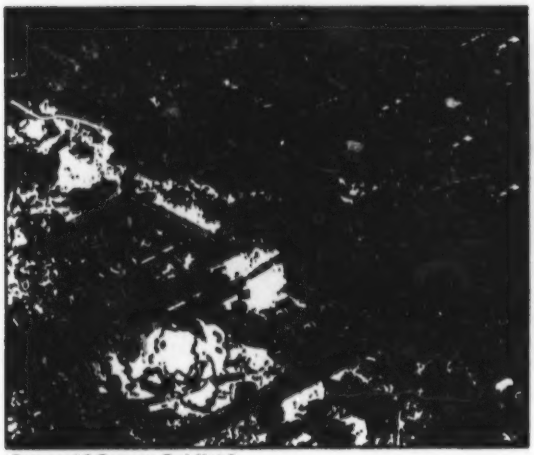
When describing how central violence is to the game, what is meant by "significant," "incidental" and "major outstanding feature"?

Incidental violence occurs when the actions have no effect on the outcome of the game. Violence is *significant* to the plot if the actions are necessary for the protagonists to achieve their goals. Finally, violence is a *major outstanding feature* if the actions are the primary focus of the game itself and not a means to another end.

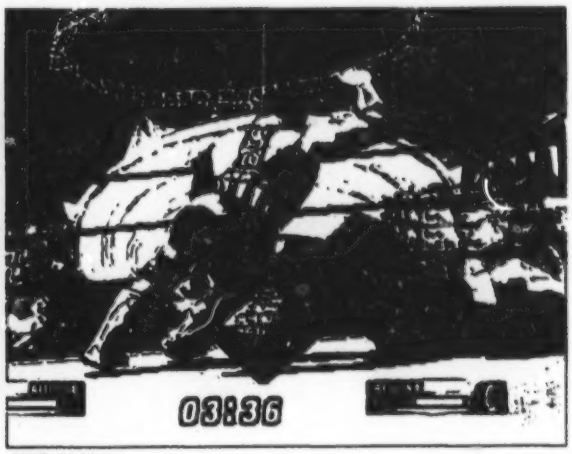
What is the difference between the types of aggression and violence found in "sports" and "non-sports" video games?

In sports video games, physical aggression is presented as a socially acceptable form of violence. In some games, it is even required in order to participate. Although physical aggression in sports video games can result in injury, the athletes usually are shown to be unaffected and the use of violence is depicted as justifiable in order to subdue and/or immobilize opponents in order to score points. In non-sports video games, violence is often used to injure, debilitate or kill opponents in order to win the game. The types of violence depicted in non-sports games are generally not socially acceptable and most are illegal.

Previous Children Now research on media images and messages about masculinity has demonstrated that physical aggression and explicit violence, whether depicted on a gamefield or battlefield, reinforce a rigid "code of masculinity" that society conveys to boys.[14] In the sports and non-sports media environment, aggression and violence are presented as equally exciting, expected, acceptable and admirable ways to accomplish one's goals. These values are most evident in the manner in which male sporting events are promoted and commented upon by announcers, and in the rewards bestowed upon film and television male action heroes.



Command & Conquer: Red Alert 2



WWF: No Mercy

E is Not for Everyone

The Entertainment Software Ratings Board (ESRB) is an "independent, self-regulatory entity" that rates video games for age appropriateness and, when relevant, provides descriptors of violent and sexual content. In 1998, the ESRB added a new category to its rating system, "E" for "Everyone." "E" rated titles have been judged to be appropriate for players ages six and older, but "may contain minimal violence, some comic mischief or some crude language."[1]

Yet according to Children Now research, despite their rating, "E" games are not always suitable for "everyone."

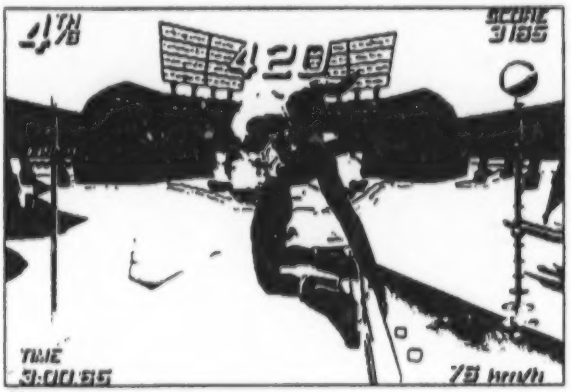
More than three fourths of games rated "E" contained violence. Of the 43 games rated "E" in the sample, 34 (79%) contained some type of violent content. Twelve of these games (28%) featured serious depictions of violence. Violence was significant to the plot in 20 games, and was the major outstanding feature in two games. However, in addition to their liberal "E" rating, *10 of these 34 games received no ESRB content rating for either mild violence or violence.*

Nearly half of "E" rated games included characters who used weapons. Twenty-one of the 43 "E" rated games (49%) featured characters acting aggressively *with* weapons. In all of these games except for one, the *player-controlled* characters acted aggressively with weapons.

More than one third of the "E" rated games included characters with some body exposure. Of the 43 games rated "E," 16 (37%) portrayed characters that were either wearing revealing clothing or were partially nude. Nine of these games portrayed male characters with some body exposure; seven games portrayed female characters in this way.

"E" rated games lacked gender and racial diversity. There were nearly six times more male characters (819) than female characters (146) in "E" rated games. Although white (41%) and African American (22%) characters were fairly well represented, Latino, Native American, and Asian/Pacific Islander characters each comprised less than 2% of the population of "E" rated games.

It's clear that the ratings don't always provide an accurate description of video game content. Parents may need to read more than just the ratings in order to select games they deem appropriate for their children.



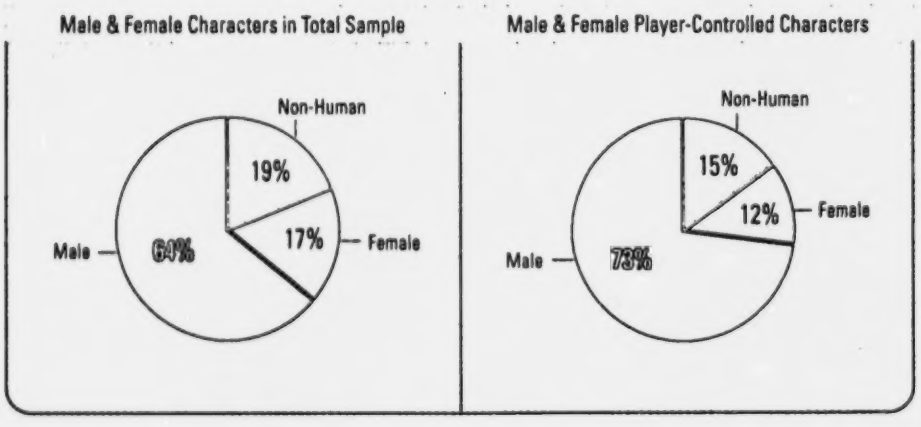
SSX

Legend of Zelda: Oracle of Seasons

Gender

A growing topic of research and debate has centered on the issue of video games and gender. There is great concern about the ways that females are portrayed in video games and the effect that these portrayals can have on young girls' self-image as well as boys' expectations of and attitudes towards females. There is also increasing concern about the kinds of messages that video games send to boys about masculinity, such as the appropriateness of expressing their emotions, the acceptable ways of dealing with conflict, the treatment of women and the ideal male body size.

What types of messages do the portrayal of male and female video game characters send to young players? What types of behaviors are modeled as appropriate for boys and girls? Are games perpetuating gender stereotypes, such as the helpless female and the brave, stoic male?



The Male and Female Populations

Female characters accounted for a small minority of characters in video games. Of the 1716 total characters analyzed in this study, male human characters totaled 1106 (64%) while female human characters numbered only 283 (17%).[15] On average, 17 males appeared in each game, compared to only four females. In addition, more than half of the 70 games in the study featured two or fewer female characters.

Females were even less likely to be player-controlled characters. Of the 874 player-controlled characters, 635 (73%) were males, and only 107 (12%) were females. Players are more likely to have an opportunity to play a non-human character than a female.

FAQ

Why are player-controlled characters important?
Player-controlled characters are those characters whom players can usually choose and whose actions they navigate and manipulate through the course of the game. Player-controlled characters are important since they are the characters that players "become" and with whom they are more likely to identify.

Males were far more likely than females to appear as player-controlled characters. Sixty of the seventy games (86%) offered male player-controlled characters while only 36 games (51%) contained even one female character for players to control. Twenty-five games featured only male player-controlled characters, yet only two games (both *Tomb Raider* titles) featured exclusively female choices.

Character Roles

Half of all female characters were props or bystanders while male characters were predominantly competitors. While the primary role for male characters was competitor (47%), the primary role for females was that of prop (32%). Props are characters that provide useful information to the player, but do not engage in any action. In addition, 18% of female characters were bystanders, or characters that spoke but did not provide any useful information or resources. Combined, this means that 50% of the female characters did not engage in the action at all.

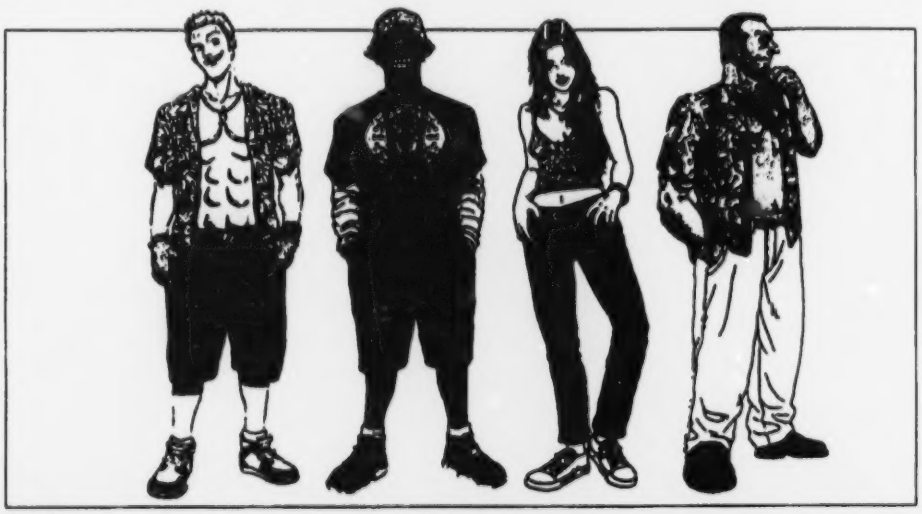
Female player-controlled characters were less likely than males to be competitors and more likely to be participants. Seven out of ten (70%) male player-controlled characters assumed the role of competitor, while just over one third of female player-controlled characters (37%) had the same role. Females were also

seven times more likely to be participants (22%) than were males (3%). Participants are characters that obey the commands of the player, but do not necessarily have personalities or abilities of their own.

Gender Stereotyping

Female and male characters behaved in different, and often stereotypical, ways. Male characters were more likely than females to engage in physical aggression (52% and 32%, respectively). However, female characters were nearly twice as likely to use verbal aggression and ridicule (9% vs. 5% of males), and more than three times as likely to scream (18% vs. 5% of males). In behaviors more traditionally associated with females, they were more than twice as likely as males to share and help (32% vs. 15% of males), and four times as likely to be nurturing (8% vs. 2% of males).

Female characters were sometimes hypersexualized and male characters were often hyper-muscularized. One out of every ten female characters (11%) had a very voluptuous body (i.e., very large breasts and a very small waist). Another 7% of female characters had either very thin or extremely disproportionate bodies, meaning that nearly 20% of female characters modeled unhealthy or unrealistic body sizes. In addition, one in three male characters (35%) was extremely muscular.



Crazy Taxi

Top Male Player-Controlled Character Roles			Top Female Player-Controlled Character Roles		
Role	Number	Percent	Role	Number	Percent
Competitor	445	70%	Competitor	40	37%
Wrestler/Fighter	114	18%	Wrestler/Fighter	25	24%
Hero/Rescuer	38	6%	Hero/Rescuer	11	11%
Participant	22	3%	Participant	23	22%
Villain/Assassin	9	1%	Villain/Assassin	3	3%
Killer/Combatant	7	1%	Killer/Combatant	3	3%

BEST COPY AVAILABLE

Did You Know?

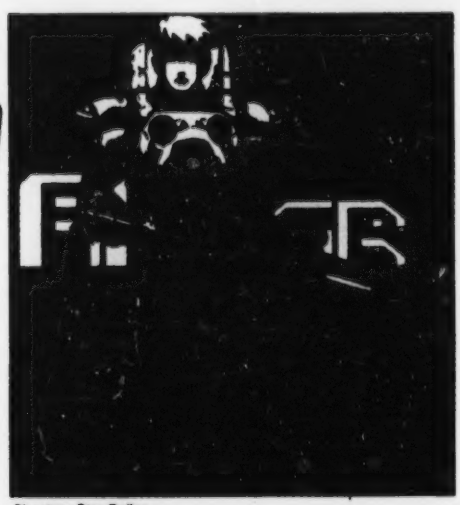
Although sexy female characters are created to appeal to males, they can send harmful messages to both male and female players. Just as young girls may interpret highly sexualized characters as symbols of the "ideal woman," so too may young boys. These impressions may influence girls' feelings about themselves and their place in the world, and they may also influence boys' expectations and treatment of females. In both cases, these images can have unhealthy effects on children's self-esteem, behavior and relationships with others.

Female sexuality was often accentuated with highly revealing clothing. Female video game characters showed quite a bit of skin. Nearly one in five female characters (21%) had exposed breasts (7% fully exposed), 13% had exposed buttocks (8% fully exposed), and 20% had exposed midriffs. In addition, females were more than twice as likely as males to wear revealing clothing (20% of females and 8% of males).

Males were highly aggressive, and were more likely than females to perpetrate violence without the use of weapons. Almost two thirds of male characters (63%) engaged in physical aggression, compared to just 40% of female characters. Further, nearly half of males (42%) engaged in hand-to-hand combat, compared to 23% of females.

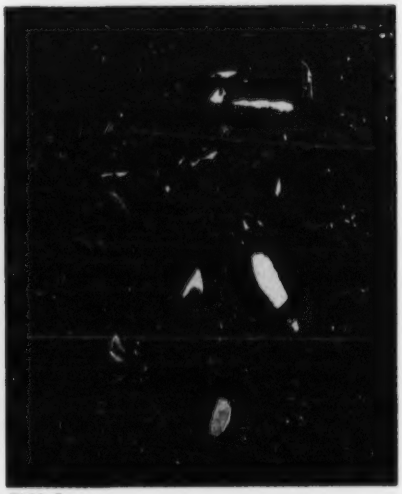
Males were three times more likely than females to appear unaffected by violence. In response to all types of violence, 33% of males appeared unaffected, compared to 10% of females. These differences appear most often in sports games. In cases of non-sports violence, males and females were equally likely (9% and 10% respectively) to be unaffected by violence.

Tomb Raider: The Last Revelation



Phantasy Star Online

Shenmue



Diablo 2

Equal Opportunity Employers?

While it is becoming more common to see female video game characters in roles traditionally held by males, there is still a tremendous difference in the way males and females are portrayed in these games. Females may be as tough as the males, and may have to face similar missions and opponents, but they have an added challenge: to look sexy while doing it. Following are some examples of the sexual divide between female characters and their male counterparts.

	Male	Female
Heroes	Link in *The Legend of Zelda* looks like a young boy and is dressed like an elf (complete with tights and pointy hat).	In *Tomb Raider*, Lara Croft's short shorts and extremely large breasts never keep her from accomplishing her mission.
Soldiers	*Command & Conquer: Red Alert's* male soldiers head off to battle in full military gear.	Tanya, *Command & Conquer's* female GI, battles the Soviets in a midriff-revealing tank top and leans forward whenever she speaks to expose her cleavage.
Competitors	In *SSX*, male competitors wear the snowboarder's uniform: baggy clothes.	Elise, a female snowboarder in *SSX* (who is described as 5'11" and 120 lbs.), wears a very tight one-piece snowsuit that shows off her ample bust. When her name is announced for a race, Elise rubs her hands up and down her sides in a very provocative manner.
Guards	In the *Legend of Zelda*, the male guard is covered from head to toe in full body armor.	In *Final Fantasy IX*, the female guard is dressed in an armor brassiere with nothing but a thong to cover her bottom half.
Robots	*Zone of the Enders'* male robots have square-shaped bodies.	Female robots in *Zone of the Enders* are quite shapely, with large breasts and curvaceous hips.

BEST COPY AVAILABLE

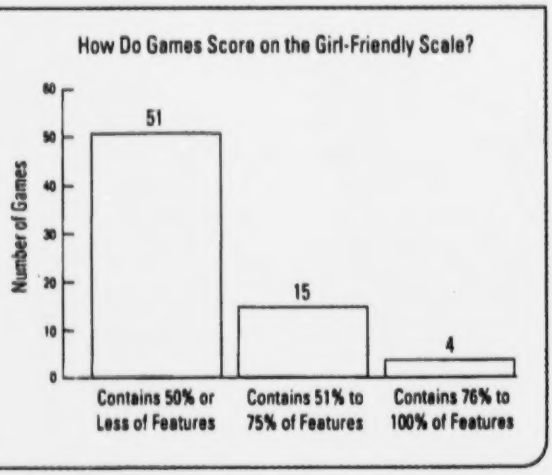
Games for Girls

It has often been said that video games are designed "by boys, for boys." Even game makers themselves rarely dispute this observation. The video game industry explains that girls are not interested in gaming and that it would not be economically wise for them to invest in producing games for a female market.

The truth, however, is that girls do enjoy playing video games. According to PC Data, 45% of computer and video game players in 2000 were female.[17] Research on girls and gaming has found that, generally, girls do appreciate different types of game features than do boys. Several studies have identified many of those elements that girls tend to enjoy.[18] These features range from the ability to create something, to a reality-based environment, to the absence of violence.

Girl-Friendly Features

- Creative Component
- Puzzle Elements
- Cooperative Play
- Available, Solicited Help
- Female Player-Controlled Characters
- Realistic Setting
- Positive, Unsolicited Feedback
- Slow or Variable Pace
- Predictable Rules
- Clear Explanation of Rules
- Absence of Violence
- Absence of Killing
- Absence of Evil Characters



BEST COPY AVAILABLE

BASEBALL

The Girl-Friendly Scale

Based on research on girls and video games, Children Now devised a 13-point "girl-friendly" scale to measure the extent to which the video games in this study contained features that appeal to girls. Each game was rated for its inclusion of these features (see Methodology). The results indicated that girl-friendly features were a rare commodity.

"We have to think less about 'girls' games' and 'boys' games' and more about games that challenge our children's minds. When it comes to computer games and software, girls want high-skill, not high-kill."

Sharon Schuster, President, American Association of University Women Educational Foundation

Overall, there were very few girl-friendly games, though PC games were significantly more girl-friendly than console games. Out of a possible total score of 13 (with 13 indicating that a game contained all of the girl-friendly features), results from the analysis indicated that:

- Only one game in the entire study, *102 Dalmatians*, received a perfect score.
- Only six games (8.5%) received a score of 9 or better. Interestingly, 5 of these 6 games were for the PC, revealing that a full 50% of PC games in this study had a significant number of features that might appeal to girls.
- The average girl-friendly score for all games was only 5.85, meaning that the average game contained less than 6 of the 13 girl-friendly features.
- Almost three-fourths of the games (n=51) feature 50% or less of the elements that girls enjoy.
- More than one in five games (21%) scored 4 or less. While 9 of the 15 were either Game Boy or Game Boy Advance games, none were for the PC.

102 Dalmatians Activity Center

Top Scoring Girl-Friendly Games

Title	Game System	Score (out of 13)
102 Dalmatians	Personal Computer	13
The Sims	Personal Computer	10.5
The Sims: House Party	Personal Computer	10.5
The Sims: Livin' Large	Personal Computer	10.5
Roller Coaster Tycoon	Personal Computer	9
Mario Tennis	Gameboy	9

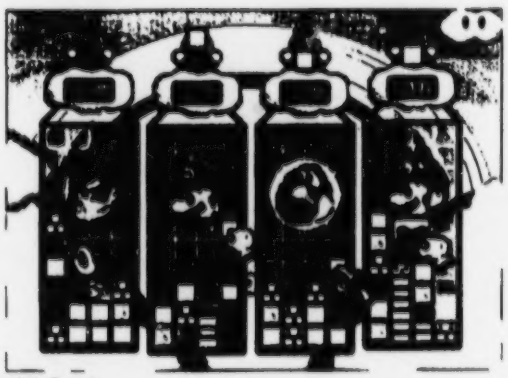
BEST COPY AVAILABLE

Why It Matters

Most popular video games don't feature elements that appeal to girls. As Cassell & Jenkins observe, females don't use power mowers as much as males, yet there is no public outcry for girl-friendly power mowers.[19] Why then is it so important that there be a conscious effort to make games for girls? Here's why:

1. Video games are an important introduction to the world of computer technology. Becoming familiar with, comfortable with and enjoying video games and computers may help girls develop an interest in careers in technology, a field in which women are significantly under-represented.[20]
2. The scarcity of girl-friendly video games may send the wrong message to girls that using computers and video games are activities for boys and are not acceptable for girls.
3. The lack of girl-friendly games ignores girls' potential to be a viable and valuable segment of the video game consumer market.
4. Playing video games helps improve computer literacy by enhancing players' abilities to understand images in a three dimensional space and to track multiple images simultaneously.[21]
5. Girls do like playing video games! The industry needs to find ways to include some of these girl-friendly features in order to attract girls to their games.

Triple Play Baseball

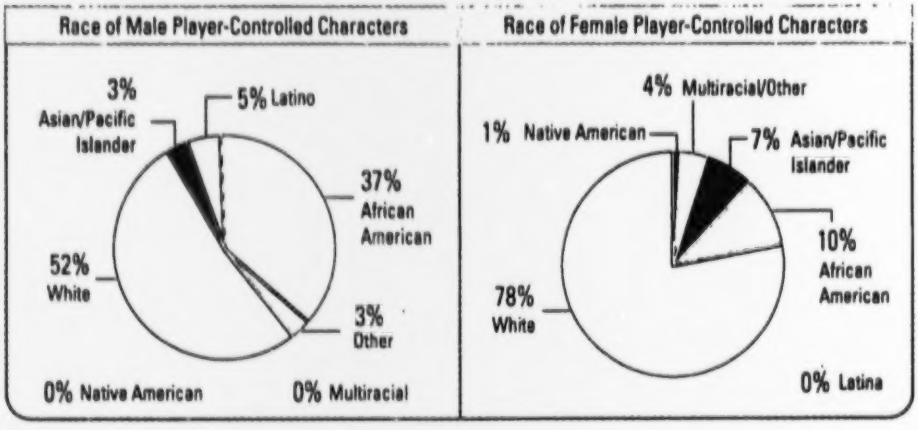

Mario Party 3

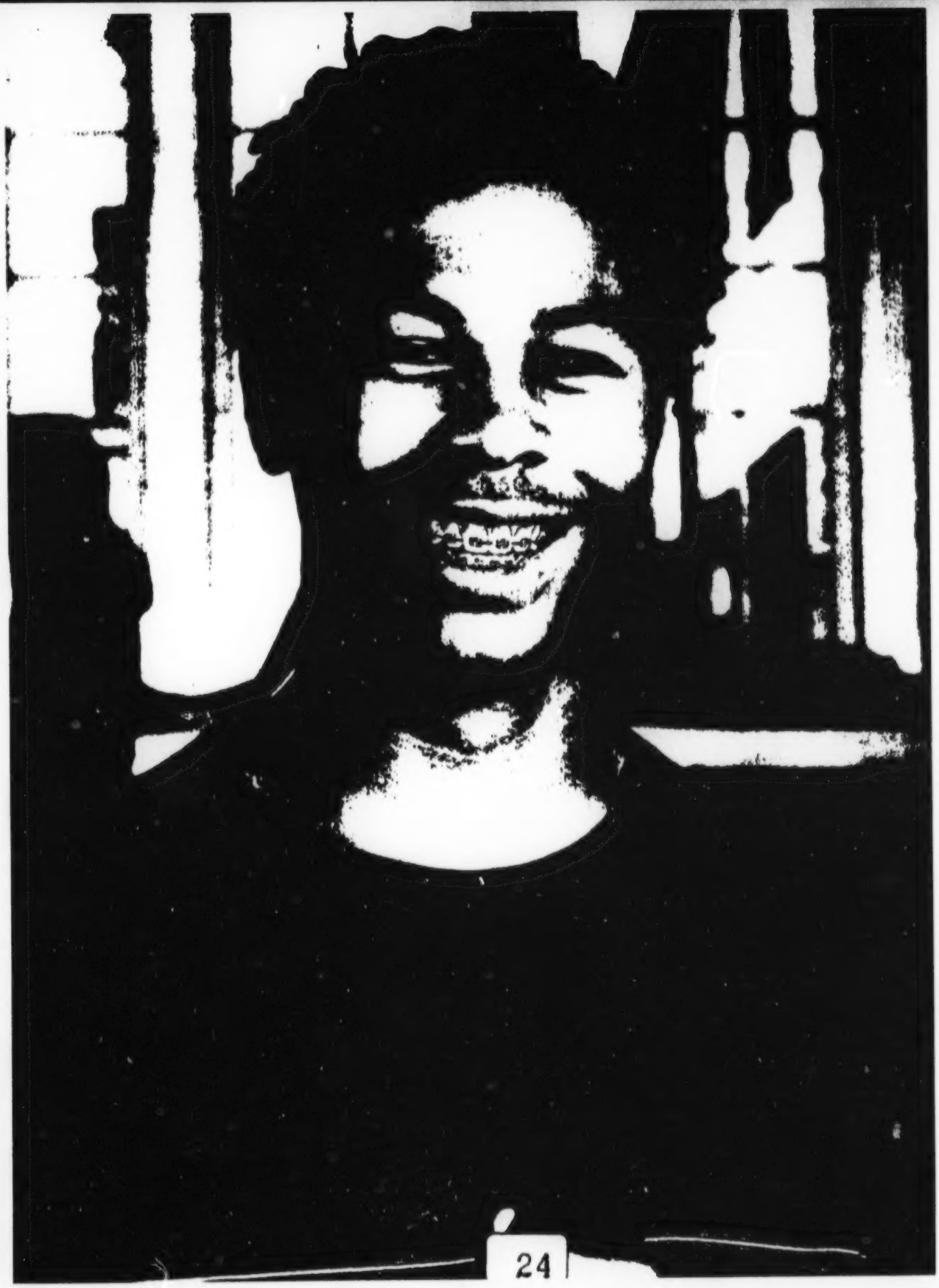
BEST COPY AVAILABLE

Race

Media messages have the ability to influence children's attitudes, values and sense of themselves. However, the implications of racial diversity and stereotypes in video games have yet to be fully explored. Any examination of the quality of messages that children receive from video games also requires a close look at how people of color are depicted in these games. These depictions have implications not only for youth of color but for white youth as well, for boys as well as for girls.

Children of all races want to see themselves represented in the media.[22] Numerous studies have reported the lack of racial diversity in traditional forms of media such as newspapers and television,[23] but how do video games fare when it comes to offering an equitable picture of racial diversity?





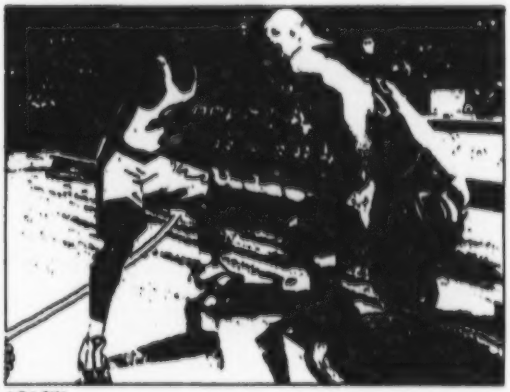
Racial Diversity

More than half (56%) of all human characters in this study were white. African Americans comprised the second largest group, representing about one fifth of all characters (22%). While Asian/Pacific Islanders accounted for 9% of all characters, Latinos comprised 2% of the population. Native Americans and multiracial characters each accounted for .2% of the characters.[24]

White female characters outnumbered female characters of every other racial group. Over half of all female characters were white (61%), followed by Asian/Pacific Islanders, at just over one tenth of the total female population (11%). African American and Native American female character portrayals trailed behind at 4% and 1% respectively.

Latina characters were non-existent. Not one of the 1716 characters in this study was Latina. Only 32 (2%) of the characters were Latino.

Native American characters were essentially invisible. None of the 1716 characters in this study were Native Americans males. Of the three Native American characters, all were female and two were props. The one player-controlled Native American female character was a wrestler/fighter.



NBA 2K1

Asian/Pacific Islanders were few in number and rarely player-controlled characters. Asian/Pacific Islanders comprised only 9% of the population. Nearly three quarters of them (72%) were computer-controlled props, bystanders or villains.

Games especially created for young children featured only white characters. The seven children's titles featured only white characters. Other characters appeared in non-human forms (i.e. puppies in *102 Dalmatians*).

Stereotypical Roles

Nearly every video game hero was white. Of the 53 heroes, 46 were white (87%). Asian/Pacific Islanders accounted for 8%, African Americans appeared as 4%, and 2% of the heroes were Latinos. There were no Native American heroes or rescuers.

Latino characters only appeared in sports games. Every one of the 32 Latino characters appeared in a sports-oriented game, usually baseball.

Asian/Pacific Islander characters were usually wrestlers or fighters and were often antagonists. Nearly three quarters of player-controlled Asian/Pacific Islander characters (69%) were cast as wrestlers or fighters. Asian/Pacific Islanders were identified as antagonists 18% of the time compared to 8% for whites, 3% for Latinos, and 2% for African Americans.

Almost all African American males were portrayed as competitors, while most African American females were non-action characters. Eight out of ten African American males (83%) were cast as competitors in sports-oriented games. The majority of African American females (86%) were either props, bystanders, or participants in games, but never competitors.

Rates of Victimization

African American females were far more likely than any other group to be victims of violence. Nearly nine out of ten African American females (86%) were victims of violence. Their victimization rate was almost twice that of white females (45%) and nearly four times the rate of Asian/Pacific Islander females (23%).

African American characters were least likely to have realistic responses to violence. More than half of the African American characters (61%) were "unaffected" by violence and only a fraction (15%) exhibited both pain and physical harm. However, nearly half of white characters exhibited both pain and physical harm (43%) and only a quarter (23%) were unaffected by violence. In addition, two thirds of Asian/Pacific Islander characters exhibited both pain and harm (66%) while only 7% were unaffected by violence.

Latinos were almost always shown exhibiting physical harm and pain. Eighty-three percent of Latino characters demonstrated physical harm and pain after being injured. This is especially interesting since most Latinos appear in sports games where athletes are often unaffected by violence.

Race and Violence

In non-sports games, white characters were the most likely to use weapons. Almost one third of white characters in non-sports games (31%) used weapons. African American characters used the most verbal aggression, screaming, ridicule and insults (23%). Latino characters were most likely to use physical aggression without weaponry (36%). Asian/Pacific Islander characters were least likely to use weapons as part of their aggressive behavior (11%).

In sports games, African Americans were most likely to display aggressive behaviors. Nearly eight out of ten African American competitors (79%) engaged in physical and verbal aggression compared to only 57% of white competitors. African American competitors were the only racial group to use verbal aggression on the field.

When thinking about diversity and gaming content for children, game developers should question whether:

- The content is meaningful to children from different racial groups
- The content provides strong role models
- The content creates or exploits stereotypes—ethnic, racial or gender[28]

Think about the messages delivered to youth when characters of color often are found at the business end of a fist, club or gun or competing in a sports arena.

25 26

System Comparisons

How do the ten top-selling games for each system differ in their depictions of race, gender and violence? Are all systems created equal? Children Now examined the seven game systems to determine how they compared to each other.

	% of Violent Games	Seriousness of Violence	Significance of Violence	Presence of Females	Revealing Attire		Average Body Type		Girl-Friendly	Racial Diversity
					M	F	M	F		
Nintendo 64										
Game Boy Color										
Game Boy Advance										
Dreamcast										
PlayStation										
PlayStation2										
Personal Computer										

Worse Than Average | Average | Better Than Average

Note: This table represents quantitative results only. A score of better than average only indicates that, for the games studied, that system performed better than most of the other systems in that category, not that it is necessarily ideal. Results are based on the ten top-selling video games for each console system. Refer to the methodology for more detailed information.

2: 27

Nintendo 64

- All of the games featured violence, and in most of them (90%), violence was either a significant or an outstanding feature of the plot.
- Most of the games contained comic violence (70%); the remaining thirty percent contained serious depictions of violence.
- Nintendo 64 scored "worse than average" for racial diversity, with characters of color accounting for only nine percent of all characters.

Game Boy Color

- Eighty percent of the games featured violence, which was significant to the plot in all of them.
- Only twenty percent of the games contained serious depictions of violence, the lowest among the systems (tied with personal computer games).
- Game Boy Color had the least racially diverse characters among all of the systems. Two out of three characters were white (67%) and Asian/Pacific Islander and African Americans together accounted for only one percent of all characters. There were no characters of Native American or Latino descent.

Game Boy Advance

- Ninety percent of the games contained some amount of violence, which was serious in nature and significant to the plot in almost half of them.
- Female characters on this console system were the least likely to have average, healthy body types (44%).
- This console received the lowest score on the girl-friendly scale (4.05).

Dreamcast

- All games contained some level of violence; eighty percent contained mostly serious depictions, and fifty percent contained sports violence.
- Female characters had the highest percentage of average body types (84%), but males had the lowest rate (44%) of average bodies among the systems.
- The majority of characters were people of color (57%), resulting in the most diverse cast of characters of any system. This diversity can be attributed to the number of sports games.

PlayStation

- Almost all of the games (90%) featured violence, which was serious in all of them. Sixty percent of the titles employed violence as either a significant or an outstanding feature of the plot.
- Nearly half of the female characters were portrayed with unhealthy body types (48%) and over a third (36%) were shown in revealing clothing, the highest among the console systems.
- Overall, PlayStation had the lowest score with a ranking of "worse than average" in eight of the ten categories.

PlayStation 2

- Eight games contained violence, six of which featured violence as a significant or an outstanding element of the plot.
- One fourth of the female characters were shown in revealing clothing, giving PlayStation 2 a "worse than average" rating.
- Males were nearly six times more likely to be featured than females (83% vs. 14%), representing the worst gender diversity among systems.

Personal Computer

- Seven of the games contained violence, the smallest number among the systems. Five games contained mostly comic depictions while only two contained serious violence.
- Gender diversity in personal computer games was the best among all of the systems, with male and female characters comprising 53% and 38% of the population, respectively.
- The girl-friendly score was the highest of the systems (8.35).
- Personal computer games had the highest percentage of white characters (70%) and had no characters of Native American or Latino descent.
- Overall, personal computer games had the highest scores, ranking "better than average" in seven of the ten categories.

BEST COPY AVAILABLE

Conclusion

Over the last 25 years, the video game industry has grown into a multi-billion dollar commercial giant. With hundreds of titles available on the seven game systems, and with rapid technological advances, young players are being introduced to an increasing number of realistic characters and robust virtual environments in which to play.

These "real-life" video games may send strong negative messages about violence, gender and race to their youngest and most vulnerable players. *Fair Play? Violence, Gender and Race in Video Games* found that video games often glorify violence, ignore women and people of color and reinforce racial and gender stereotypes. Overall, the study's findings demonstrate that the messages found in video games are indeed cause for concern.

Video games are overwhelmingly violent. Nearly every game in this study contained some violent content. All too often the violence was depicted without consequence to the perpetrator or the victim, sending the message that violence was an acceptable way to achieve one's objective, was funny or harmless, or that players could be heroes if they used violence successfully. These findings are particularly powerful because some children internalize these messages and, as a result, may act aggressively or become desensitized to violence.

Video games also reinforce unhealthy gender stereotypes and messages. Not only are females severely under-represented, they are generally cast in either insignificant or stereotyped roles. Even when the female characters break out of the role of the helpless victim, their powers and strengths can be overshadowed by their hyper-sexualized bodies and attire. Further, while male characters significantly outnumber their female counterparts, they, too, are often cast in stereotypical roles and given unrealistic hyper-muscularized bodies. These types of portrayals send strong negative messages to children that there are certain ways that males and females are supposed to look and act.

Video games also contain very little racial diversity. When they do show diversity, they often incorporate stereotyped images and roles for people of color. Rarely ever cast as champions, rescuers or heroes, their portrayals often amount to nothing more than hyper-muscularized brutes, exotic fighting machines or athletes displaying near-supernatural ability. These kinds of racial images can contribute to children's unhealthy attitudes towards people of other races. In addition, children of color may feel devalued or ignored due to limited and stereotypical representations of people from their own racial group.

Fair Play? Violence, Gender and Race in Video Games demonstrates that video games send strong, negative messages to young players in very real and powerful ways. These messages may have a negative impact on children's healthy development, and may influence their self-image and attitudes toward others as well. Therefore, Children Now calls upon game makers to make a concerted effort to develop video games in ways that can deliver healthy messages to our kids.

Methodology

This study examined the ten top-selling games created for each of six video game consoles available in the U.S. (Dreamcast, Game Boy Advance, Game Boy Color, Nintendo 64, PlayStation and PlayStation 2) and for personal computers. Game lists were obtained from NPD TRSTS Video Games Service and identified the top sellers for each system for the period of January to May 2001. The one exception was for Game Boy Advance which, due to the release of the system in May, covered the period of May to June 2001.

All content was subjected to two levels of analysis:

- Macro-level analysis examined such game characteristics as genre, rating, game elements and levels of sexual and violent content.
- Micro-level analysis identified each unique character and examined such characteristics as gender, race, role and the character's ability to commit and be a victim of violence.

Each game was played through the first level using each of the available player-controlled characters. When both single-player and multi-player options were available, coders played both options with each character. Information about games and characters was obtained from player experience and from consulting the player manuals that accompanied each game.

Sports games were treated somewhat differently since their characters numbered in the hundreds, while in the other games in the sample, there were many fewer characters. To avoid statistical problems that occur when one class of variable is much greater than the others (in this case, athletes), a representative sample of athletes was selected from the games. In all of the games in which this sampling occurred, the characters chosen included all the players and coaches on the two exhibition teams, announcers and officials. This way, the character set of those games was roughly equal in size to the character set of other games.

All content was coded by Katharine E. Heintz-Knowles, Ph.D. and one trained coder. To ensure reliability between coders, ten percent of the sample was coded by each of the coders independently. The percent of agreement between coders was calculated. All variables included in this analysis received a level of agreement of at least 94%.

Legend of Zelda: Oracle of Seasons

Girl-Friendly Scale

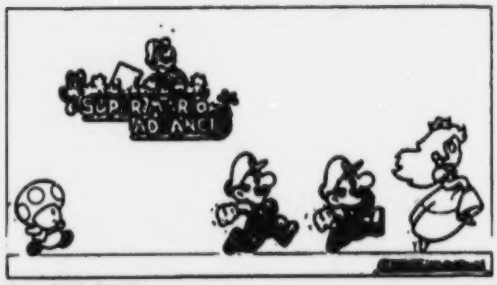
Each game in the study was also rated for its inclusion of features that have been found to appeal to girls. The resulting Girl-Friendly Scale had a range of 0-13 points based on the following criteria:

Games received one point for each of the following "girl-friendly" elements:

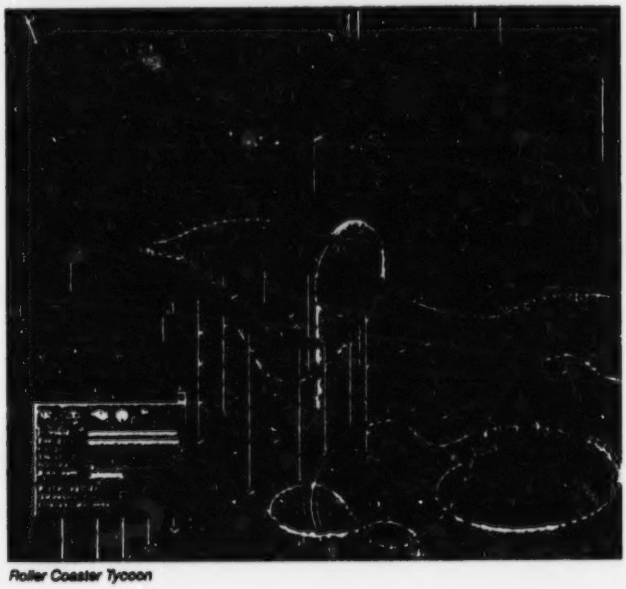
- Female player-controlled characters
- Cooperative play (ability to work cooperatively with other players)
- Ability to create something
- A reality-based environment
- Puzzle-type activities
- Presence of positive feedback
- Availability of help
- Slow or variable pace
- Predictable and easy to follow game play
- Clearly explained rules

Games also received one point if they did not contain the following features:

- Violence
- Killing
- A theme of good vs. evil



Super Mario Advance



Roller Coaster Tycoon

System Comparisons

The ratings of "worse than average," "average" and "better than average" for each system were calculated by dividing the range of scores across systems for each feature into three categories as follows:

Feature	Range of Scores	Worse Than Average	Average	Better Than Average
Percent of Violent Games	70-100%	90-100%	80%	70%
Seriousness of Violence	20-100%	80-100%	50-70%	20-40%
Significance of Violence	30-100%	77-100%	54-76%	30-53%
Presence of Females	15-42%	15-23%	24-32%	33-42%
Revealing Attire	1-36%	25-36%	13-24%	1-12%
Average Body Types	44-91%	44-58%	59-74%	75-91%
Girl-Friendly Score	4.05-8.35	4.05-5.48	5.49-6.91	6.92-8.35
Racial Diversity	4-65%	45-65%	25-44%	4-24%

BEST COPY AVAILABLE

"Fair Play?" Game Study List

Game Boy Advance
Super Mario Advance
Tony Hawk Pro Skater 2
Castlevania: Circle of the Moon
F-Zero Max Velocity
Rayman Advance
Namco Museum
GT Advance Racing
Iridion 3D
Krazy Racers
Earthworm Jim

Game Boy Color
Pokemon Silver
Pokemon Gold
Mario Tennis
Super Mario Brothers Deluxe
Pokemon Yellow
Legend of Zelda: Oracle of Seasons
Legend of Zelda: Oracle of Ages
Tony Hawk Pro Skater
Donkey Kong Country
Frogger

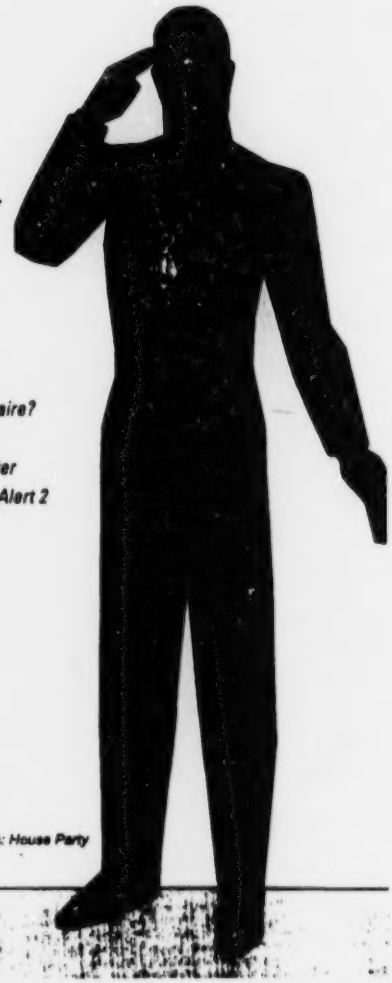
Dreamcast
NBA 2K1
Crazy Taxi
Phantasy Star Online
Sonic Adventure
NFL 2K1
Shenmue
Tony Hawk Pro Skater 2
Tomb Raider: The Last Revelation
NBA 2K
Tony Hawk Pro Skater

Nintendo 64
Pokemon Stadium 2
Paper Mario
Donkey Kong 64
Super Smash Brothers
Legend of Zelda: Majora's Mask
Pokemon Stadium
The World is Not Enough
Super Mario 64
Mario Party 3
WWF: No Mercy

Playstation
Gran Turismo 2
WWF Smackdown 2
Tony Hawk Pro Skater 2
Driver 2
Special Ops: Ranger Elite
Tony Hawk Pro Skater
Final Fantasy IX
Tekken 3
Driver
Tomb Raider: The Last Revelation

Playstation 2
Madden NFL 2001
NBA Live 2001
Onimusha Warlords
ATV Off Road Fury
SSX
Star Wars Starfighter
Tekken Tag Tournament
The Bouncer
Zone of the Enders
Triple Play Baseball

Personal Computer
The Sims
The Sims: Livin' Large
The Sims: House Party
Frogger
Roller Coaster Tycoon
Black & White
Who Wants to Be a Millionaire?
Diablo 2
102 Dalmatian Activity Center
Command & Conquer: Red Alert 2



33

The Sims: House Party

Endnotes

1 Interactive Digital Software Association, "State of the Industry Report: 2000-2001," http://www.idsa.com/pressroom.html (April 2001).

2 Steve Traiman, "Mixed Results For Game Industry – 2000's Unit Figures Were Up, But Profit Margins Were Down," *Billboard*, 10 February 2001.

3 Karen Kaplan, "Sega, Sony, Nintendo Got Game; Video Console Makers Beat Forecasts, Predict Record Year," *Los Angeles Times*, 23 December 1999, C1.

4 Kaveri Subrahmanyam, Robert E. Kraut, Patricia M. Greenfield, Elisheva F. Gross, "The Impact of Home Computer Use on Children's Activities and Development," in *The Future of Children: Children and Computer Technology* 10:2, ed. Richard E. Behrman (David & Lucile Packard Foundation, 2000), 123-144.

5 Ibid.

6 Ibid., 128. See also Mediascope, Issue Briefs: *Video Games and Their Effects* (Studio City, Calif.: Mediascope Press, 1999) at http://www.mediascope.org/pubs/ibriefs/vge.htm.

7 American Medical Association, American Psychological Association, American Academy of Pediatrics & the American Academy of Child and Adolescent Psychiatry, "Joint Statement on the Impact of Entertainment Violence on Children," Congressional Public Health Summit, 26 July 2000. See http://www.aap.org/advocacy/releases/jstmtevc.htm.

8 Mark Griffiths, "Video Game Violence and Aggression: A Review of Research," in *United Nations Educational, Scientific and Cultural Organization: Children and Media Violence Yearbook 2000*, eds. Cecilia von Feilitzen and Ulla Carlsson (UNESCO Publishing, 2000), 31-33.

9 Thomas N. Robinson, Marta L. Wilde, Lisa C. Navracruz, Farish Haydel, Ann Varady, "Effects of Reducing Children's Television and Video Game Use on Aggressive Behavior," *Archives of Pediatrics and Adolescent Medicine* 155:1 (January 2001), 17-23.

10 Joel Federman, ed., "Executive Summary: National Television Violence Study," vol. 3 (University of California, Santa Barbara: Center for Communication and Social Policy, April 1998), 8. See http://www.ccsp.ucsb.edu/execsum.pdf.

11 Ibid., 10.

12 Stephen Kline, "Killing Time? A Canadian Meditation on Video Game Culture," in *United Nations Educational, Scientific and Cultural Organization: Children and Media Violence Yearbook 2000*, eds. von Feilitzen and Carlsson, 35-59.

13 David Grossman, quoted on ABC News' *20/20*, 22 March 2000.

14 Children Now: Children and the Media Program, "Boys to Men: Sports Media Messages About Masculinity" (Children Now, 1999), 1-11.

15 Entertainment Software Rating Board, "ESRB Video and Computer Game Ratings: About Ratings and Descriptors," http://www.esrb.com/esrb_about.asp.

16 When discussing gender and race in this report, we refer to the human character population unless otherwise noted.

17 PC Data, Inc., "Spotlight on Games: Categories and Hardware" (PC Data, December 2000).

18 K. Subrahmanyam and Patricia Greenfield, "Computer Games for Girls: What Makes Them Play?" in *From Barbie to Mortal Kombat: Gender and Computer Games*, eds. Justine Cassell and Henry Jenkins (Cambridge, Mass: MIT Press, 1998), 46-67.

19 Justine Cassell and Henry Jenkins, "Chess for Girls? Feminism and Computer Games," in *From Barbie to Mortal Kombat: Gender and Computer Games*, eds. Cassell and Jenkins, 11.

20 American Association of University Women, "Tech-Savvy: Educating Girls in the New Computer Age" (AAUW, 2000). See http://www.aauw.org/2000/techsavvy.html.

21 Kaveri Subrahmanyam, Robert E. Kraut, Patricia M. Greenfield, Elisheva F. Gross, 127.

22 Children Now: Children and the Media Program, "A Different World: Children's Perceptions of Race and Class in the Media" (Children Now, May 1998). See http://www.childrennow.org/media/mc98/DiffWorld.html.

23 Children Now: Children and the Media Program, "Fall Colors 2000-01: Prime Time Diversity Report" (Children Now, April 2001) at http://www.childrennow.org/media/fc2001/fc-2001-report.pdf. See also Children Now: Children and the Media Program, "The Local Television News Media's Picture of Children," (Children Now, October 2001) at http://www.childrennow.org/media/local-news-study/index.htm.

24 According to the 2000 U.S. Census, the American youth population by race is approximately 65% white, 16% Latino, 15% African American, 4% Asian/Pacific Islander and 1% Native American.

25 "Criteria to Consider When Creating New Media Content for Kids," adapted from "Criteria for Online Excellence," developed by David Kleeman (Executive Director, American Center for Children and Media) and Carla Seal Wanner (Founder, @ccess4@ll), http://www.excite.com/childrenandmedia/content/ (July 2000).

Children Now Board of Directors

Allan K. Jonas	Chairman of the Board, Children Now Jonas & Associates, Owner
Carol Bennett, M.D.	West LA VA Healthcare System, Chief of Urology
Peter D. Bewley	The Clorox Company, Senior Vice President, General Counsel & Secretary
William Coblentz	Coblentz, Patch, Duffy & Bass, LLP, Senior Partner
Anita L. DeFrantz	Amateur Athletic Foundation, President
Jane Gardner	Scientific Learning, Vice President of Marketing
Irene M. Ibarra	Alameda Alliance for Health, Chief Executive Officer
David G. Johnson	Investor
Suzanne Nora Johnson	Goldman, Sachs & Co., Managing Director
Donald Kennedy	Stanford University, President Emeritus; *Science*, Editor-in-Chief
Theodore R. Mitchell	Occidental College, President
Molly Munger	English, Munger & Rice, Partner
Hon. Cruz Reynoso	UC Davis, School of Law, Professor
Lois Salisbury	Children Now, President
Katharine Schlosberg, Ed.D.	San Jose State University, Teacher Leadership Program
James P. Steyer	JP Kids, Chairman & CEO
Michael Tollin	Tollin/Robbins Productions, Co-President

Children & the Media Steering Committee

Karen Jaffe, KIDSNET

Dolores Morris, HBO Family Channel

Raul Ramirez, KQED-TV

Dr. Donald Roberts, Stanford University

Carole Simpson, ABC News

Ruth Wooden, Porter Novelli

Children Now is a research and action organization dedicated to assuring that children grow up in economically secure families, where parents can go to work confident that their children are supported by quality health coverage, a positive media environment, a good early education, and safe, productive things to do after school. Children Now designs its strategies to improve children's lives while at the same time helping America build a sustained commitment to putting children first. Recognized for its expertise in media as a tool for change, Children Now is an independent, nonpartisan organization.

The Children & the Media Program works to improve the quality of news and entertainment media both for children and about children's issues, paying particular attention to media images of race, class and gender. We seek to accomplish our goals through media industry outreach, independent research and public policy development.

Acknowledgements and Credits

Research Conducted By:	Katharine Heintz-Knowles, Ph.D. and Jennifer Henderson
Report Written By:	Christina R. Glaubke, Patti Miller, McCrae A. Parker and Eileen Espejo
Editorial Assistance:	Shirin Shoai
Design By:	Dennis Johnson, Ted Szeto, Dennis Johnson Design

The lists of top-selling video games were provided by NPD TRSTS Video Games Service.

Children Now would like to thank Circuit City for donating video games for the purposes of this study.

Children Now wishes to express its gratitude to the Atlantic Philanthropic Service Company, Inc. for their generous support of this publication.

Cover Images: (clockwise) *Tekken 3; 007: Agent Under Fire; Legend of Zelda: Oracle of Seasons; Tomb Raider: The Last Revelation.*
Back Cover: *Onimusha Warlords*

Children Now Offices

Oakland
1212 Broadway
5th Floor
Oakland, CA 94612
Tel (510) 763-2444
Fax (510) 763-1974
children@childrennow.org

Los Angeles
2001 South Barrington Ave.
Suite 100
Los Angeles, CA 90025
Tel (310) 268-2444
Fax (310) 268-1994

www.childrennow.org

CHILDREN NOW

Printed on recycled paper

BEST COPY AVAILABLE